**Amendments to the Specification:**

On page 3 of the specification, please amend the paragraph which beings on line 26, as follows:

The present invention overcomes the above-identified deficiencies in the art and solves the above problems by providing watermark embedding by which each signature bit is spread over the whole image, or at least over a large area of it, ~~according to the appended independent claims~~. The signature derives bits from all image regions, including areas with flat or otherwise un-watermarkable content, thus enabling authentication of all image regions. The embedding of the watermark is done so as to achieve the best trade-off between payload size, robustness, and visibility. The technical effect thus achieved is that signature bits of all image areas can be extracted, even if the original content is flat or has been replaced by tampering. Moreover, the embedding method becomes independent of the signature generation.